

**Exemption 6**

**PHASE 2 SITE INVESTIGATION**

**C. W. Process Company  
5051 Williams Boulevard S.W.  
Cedar Rapids, Iowa  
EPA RCRA ID No. IAD005277256**

Prepared for:

The [REDACTED] Estate

BET Report No. #04432  
July 17, 2004

Prepared by:

Blackhawk Environmental Testing, Inc.  
P.O. Box 85  
Denver, Iowa

Telephone: (319) 984-6600

Telefax: (319) 984-6961

RECEIVED  
JUL 22 2004  
ARTD/RCAF

July 17, 2004

**B**lackhawk  
**E**nvironmental  
**T**esting

Michael W. Rickert  
Attorneys at Law  
P.O. Box 193  
Reinbeck, IA 50669

Re: Phase 2 Site Investigation  
C. W. Process Company  
5051 Williams Boulevard S.W.  
Cedar Rapids , Iowa

Dear Mr. Rickert:

Introduction

The purpose of this report is to present the field data collected by Blackhawk Environmental Testing, Inc. (BET) for the above referenced project. The work was performed in accordance with BET proposal No. 04432 and your written authorization of February 10, 2004.

Background Information

The above referenced site consists of one vacant, approximately 1800 square foot house on partial basement with a nearby approximately 4,500 square foot metal manufacturing building with concrete floors and several small attached storage sheds. An approximate 1000 square foot garage and several other storage buildings are also located on site situated with approximately 23 acres of crop land. Until recently, the site was occupied by the C. W. Process Company, a hammer handle manufacturing facility.

The majority of the metal building space is considered factory and machining areas. Four furnaces are located off the factory area on the northeast side of the building. A small office is located on the northwest side of the building. A hazardous waste staging area is located on the southeast side of the building. Adjacent west is an evaporator unit closure area. A fiberglass storage area is located on the southwest side of the building. A gravel driveway runs from Williams Blvd. past the house, garage and manufacturing building to a shed at the south end of the property containing a waste storage area. The balance of the outside area is covered with grass.

An EPA mandated closure plan was submitted on August 22, 1996 and approved on September 9, 1996. The closure plan and the associated closure plan development report of July 1994 identified several potential closure areas: a hazardous waste staging area, an evaporator dry down area, a hazardous waste storage area and former furnace #2. In addition, the BET phase 1 environmental assessment report of January 7, 2004 identified furnace #1, a former treatment pond, ASTs, hundreds of mostly empty drums and old cars and other scrap yard items as recognized environmental conditions.

Blackhawk Environmental Testing, Inc.  
P.O. Box 85 \* Denver, IA 50622 \* 319/984-6600 \* 319/984-6961 FAX

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## Site Activity

A BET field technician, drill rig and crew were mobilized to the site on May 19, 2004. No work was initiated until a site safety meeting primarily about cyanide was conducted. A total of three drill auger soil borings were advanced in the suspected downgradient direction from the waste storage building, two 240 gallon ASTs and the former treatment pond. The borings were advanced through clay and sand layers into a dense gray sandy lean clay. Soil samples were collected from the borings at two foot intervals and screened with a photoionization detector (PID). Since no PID readings greater than background were recorded at TMW1 and TMW2 and 2.3 ppm was the highest PID reading at TMW3, soil samples were not submitted for laboratory analysis. All three borings were converted into temporary monitoring wells and secured for future sampling. Boring logs for the three monitoring wells are appended.

BET contacted Mr. Ken Herstosky of the EPA on May 25, 2004 and advised him of a June 7, 2004 scheduled sampling date. A BET field technician was mobilized to the site on June 7, 2004. A 3 inch diameter hand auger was utilized for collecting soil samples from the 3 to 6 inch interval at locations identified most likely to have had a cyanide salt spill. A total of seven soil samples were collected near furnace #1, former furnace #2, the hazardous waste staging area, the evaporator dry down area and the waste storage area. Soil samples were submitted for laboratory analysis of cyanide.

A tap water sample was collected from the office bathroom. Several gallons of drinking water were flushed to remove stagnant water from the drinking water well and associated piping prior to sample collection. Each of the temporary monitoring wells were developed by removing a minimum of three well volumes from each well. A groundwater sample was subsequently collected from each well and retained for laboratory analysis. The four water samples were submitted for laboratory analysis of cyanide, VOCs, RCRA metals and extractable hydrocarbons as diesel and motor oil (Iowa OA-2). A chemical reaction was observed in the field when adding groundwater to the purge vials with an acid preservative. Since the reaction was likely producing hydrogen cyanide, precautions were taken to prevent the inhalation of the poisonous gas. It was also decided to postpone plugging/abandonment of the temporary wells in case further definition of the cyanide plume was required.

A single 55 gallon drum was utilized for decontamination of drill and hand auger sampling equipment. Purged groundwater was subsequently containerized in the same drum. It will remain stored on site near the former treatment pond until necessary testing and disposal activities are completed. A site plan map is appended as figure 1 and a facility drawing is appended as figure 2.

## Analysis

The seven soil samples and four groundwater samples were transported to Test America, Inc. for analysis. Method detection limits were exceeded in all seven soil samples for cyanide which ranged from 2.5 to 296 mg/kg, well below the EPA closure plan limit of 1000 mg/kg and the statewide standard of 1600 mg/kg.

The drinking water well sample did not report any contaminant exceeding method detection limits.

The three monitoring wells reported cyanide, barium, diesel and motor oil concentrations exceeding method detection limits. Barium was reported in TMW1 and TMW2 but the highest concentration, 0.38 mg/l, is below the established maximum contaminant level (MCL) of 2 mg/l. Motor oil was reported in all three monitoring wells and ranged from 432 to 3920 ug/l, all above the statewide standard of 400 ug/l. Diesel concentrations were only reported in TMW3, 2300 ug/l versus the statewide standard of 1200 ug/l. Cyanide was reported in all three monitoring wells and ranged from 4.68 to 380 mg/l. The MCL is 0.2 mg/l.

### Discussion

Soil samples report cyanide concentrations but well below the EPA closure plan limit of 1000 mg/kg and the Iowa statewide standard of 1600 mg/kg.

Diesel and motor oil concentrations in groundwater exceed the statewide standards of 400 and 1200 ug/l respectively.

Cyanide concentrations in groundwater exceed the MCL of 0.2 mg/l.

Chemical	Date Sampled	TMW1	TMW2	TMW3	Standard (mg/l)
Cyanide	6/7/04	9.64	4.68	380	0.2
Diesel	6/7/04	<0.38	<0.38	2.3	1.2
Motor Oil	6/7/04	0.505	0.432	3.92	0.4

As represented by the table above, cyanide is the chemical of most concern at this site. The greatest concentrations are found at TMW3, located downgradient of the former treatment pond.

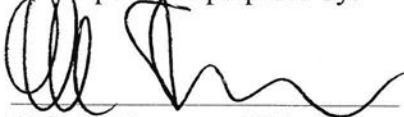
### Recommendations

Further definition of the cyanide groundwater plume will likely be required along with a private drinking water well survey of surrounding properties. Per your direction, a copy of this report has been forwarded to Mr. Ken Herstosky of the EPA.

### Standard of Care

The data contained in this report was collected in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

This report was prepared by:

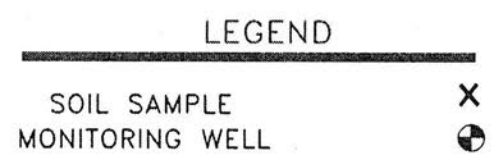
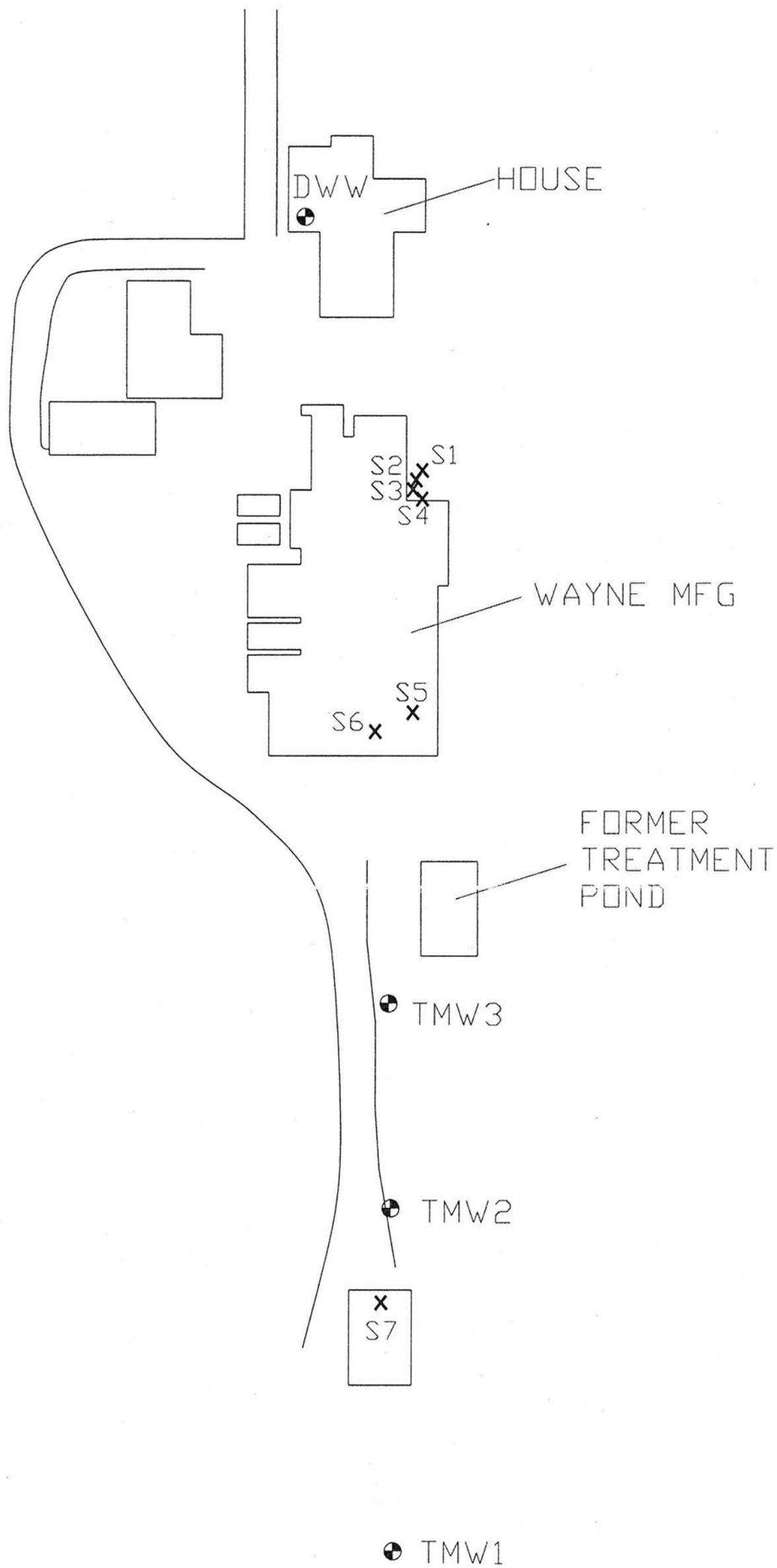


Ollie R. Thurman, P.E.  
Certified Groundwater Professional

Date: July 17, 2004

pc: Ken Herstosky/EPA  
File# 04432

Attachments: Site Plan Map  
Facility Drawing  
Analytical Report  
Boring Logs



# SITE PLAN MAP

C.W. PROCESS COMPANY  
5051 WILLIAMS BOULEVARD  
CEDAR RAPIDS, IOWA

Blackhawk  
Environmental  
Testing

P.O. Box 85  
Denver, IA 50622  
(319) 984-6600

PROJECT #: 04432

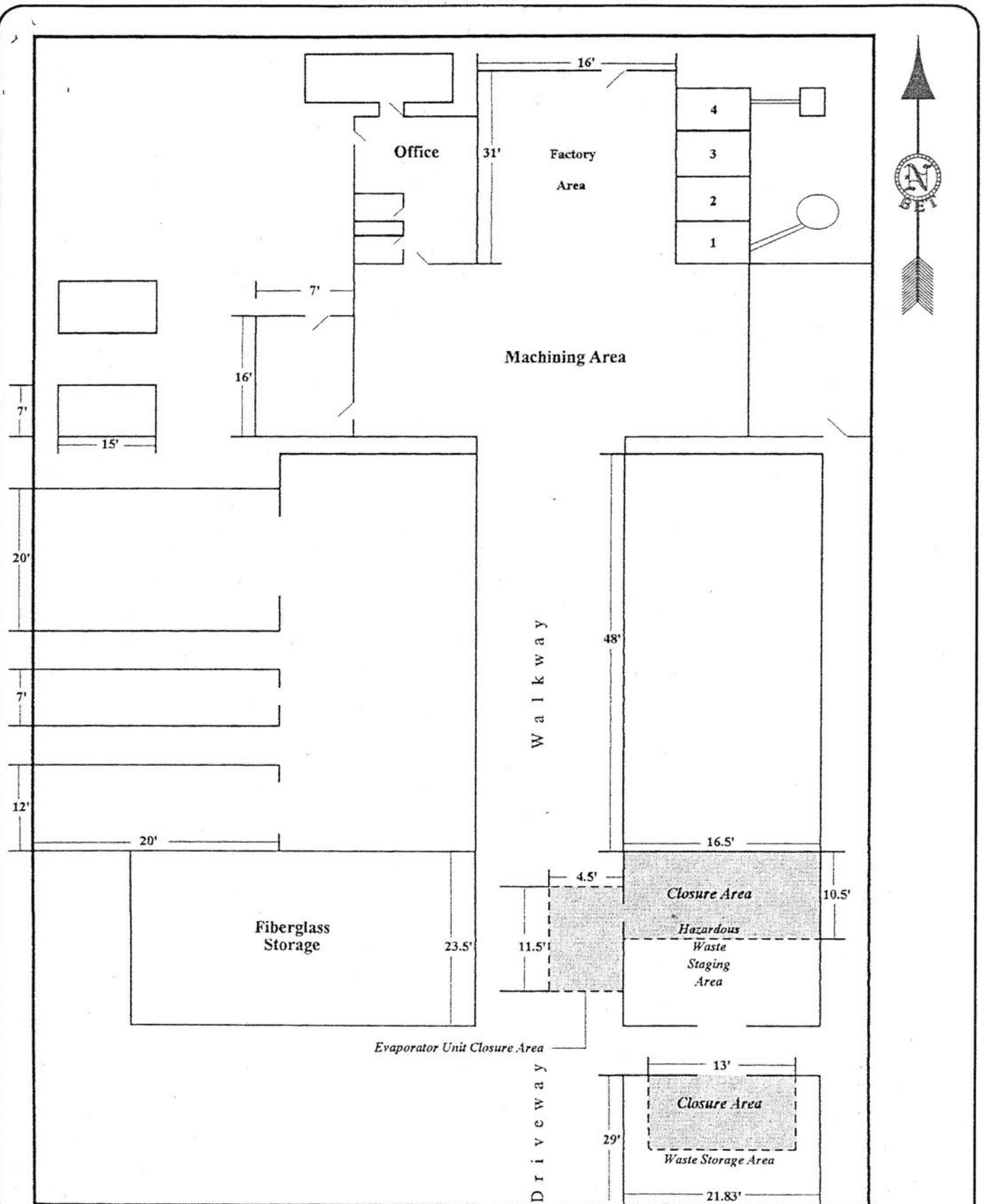
FIGURE: 1

DRAWN BY: ORT

REVIEWED BY:

DATE: 7/16/04

SCALE: 1"=40'



# FACILITY DRAWING

C.W. PROCESS COMPANY  
 5051 WILLIAMS BOULEVARD  
 CEDAR RAPIDS, IOWA

Blackhawk  
 Environmental  
 Testing

P.O. Box 85  
 Denver, IA 50622  
 (319) 984-6600

PROJECT #: 03414

FIGURE: 2

DRAWN BY: ORT

REVIEWED BY:

DATE: 12/3/03

SCALE: NA

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/18/2004

TestAmerica Job: 04.07305

Project Number: 04432  
Project: Wayne Mfg.-Cedar Rapids

Enclosed is the Analytical Reports for the following samples submitted to the Cedar Falls Division of TestAmerica Analytical Testing Corporation for analysis.

Sample Number	Sample Description	Date Taken	Date Received
803591	S1	06/07/2004	06/07/2004
803592	S2	06/07/2004	06/07/2004
803593	S3	06/07/2004	06/07/2004
803594	S4	06/07/2004	06/07/2004
803595	S5	06/07/2004	06/07/2004
803596	S6	06/07/2004	06/07/2004
803597	S7	06/07/2004	06/07/2004

TestAmerica Analytical Testing Corporation certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.



Linda Cmelik  
Project Coordinator

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/18/2004

WAYNES MFG. - CEDAR RAPIDS, IA  
04432

Date Received: 06/07/2004  
Job Number: 04.07305

	<u>Result</u>	<u>Units</u>	<u>Flags</u>	<u>Date Taken</u>	<u>Date Analyzed</u>	<u>Time Analyzed</u>	<u>Analyst</u>	<u>Analysis Method</u>
803591 S1								
Cyanide, Total	141	mg/kg dw		06/07/2004	06/15/2004	16:09	lbb	SW 9012
Solids, Total	86.05	%		06/07/2004	06/08/2004		sas	SM 2540 G
803592 S2								
Cyanide, Total	5.6	mg/kg dw		06/07/2004	06/15/2004	16:09	lbb	SW 9012
Solids, Total	86.91	%		06/07/2004	06/08/2004		sas	SM 2540 G
803593 S3								
Cyanide, Total	2.5	mg/kg dw		06/07/2004	06/17/2004		lbb	SW 9012
Solids, Total	79.28	%		06/07/2004	06/08/2004		sas	SM 2540 G
803594 S4								
Cyanide, Total	56.1	mg/kg dw		06/07/2004	06/15/2004	16:15	lbb	SW 9012
Solids, Total	82.59	%		06/07/2004	06/08/2004		sas	SM 2540 G
803595 S5								
Cyanide, Total	296	mg/kg dw		06/07/2004	06/15/2004	16:22	lbb	SW 9012
Solids, Total	91.33	%		06/07/2004	06/08/2004		sas	SM 2540 G

Key to Flags:

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/18/2004

WAYNES MFG. - CEDAR RAPIDS, IA  
04432

Date Received: 06/07/2004  
Job Number: 04.07305

	<u>Result</u>	<u>Units</u>	<u>Flags</u>	<u>Date Taken</u>	<u>Date Analyzed</u>	<u>Time Analyzed</u>	<u>Analyst</u>	<u>Analysis Method</u>
803596 S6								
Cyanide, Total	41.0	mg/kg dw		06/07/2004	06/15/2004	16:16	lbb	SW 9012
Solids, Total	93.68	%		06/07/2004	06/08/2004		sas	SM 2540 G
803597 S7								
Cyanide, Total	11.5	mg/kg dw		06/07/2004	06/15/2004	16:17	lbb	SW 9012
Solids, Total	95.94	%		06/07/2004	06/08/2004		sas	SM 2540 G

Key to Flags:

TestAmerica Job Number: 04.07305

## ATTACHMENTS

Following are the sample receipt log and the chain of custody applicable to this analytical report.

Any abnormalities or departures from sample acceptance policy shall be documented on the "Sample Receipt and Temperature Log Form" and Sample Non-Conformance Form" (if applicable) included with this report.

For information concerning certifications of this facility or another TestAmerica facility please visit our website at [www.TestAmericaInc.com](http://www.TestAmericaInc.com).

This data has been produced in compliance with 2001 NELAC Standards (July 2003), except where noted.

Samples collected by TestAmerica Field Services personnel are noted on the Chain of Custody (COC) and are sampled in accordance with TA-CF SOP CF09-01.

This report shall not be reproduced, except in full, without written approval of the laboratory.

*For questions regarding this report, please contact the individual who signed the analytical report.*

## Sample Receipt and Temperature Log Form

Client: Backhaus Environmental Project: Wayne MFG

City: Dumas, IA

Date: 6/7/04 Receiver's Initials DL Time (Delivered): 8:30

### Temperature Record

Cooler ID# (If Applicable)

12 °C / On Ice

### Thermometer:

- ☐ IR - 905085 "A"  
☐ IR - 809065 "B"  
☐ CF07-03-T2  
☐ 22126775

### Courier:

- |                                    |  |
|------------------------------------|--|
| <input type="checkbox"/> Airborne  | <input type="checkbox"/> Speedy            |
| <input type="checkbox"/> UPS       | <input type="checkbox"/> TA Courier        |
| <input type="checkbox"/> Velocity  | <input type="checkbox"/> TA Field Svs      |
| <input type="checkbox"/> FedEx     | <input checked="" type="checkbox"/> Client |
| <input type="checkbox"/> DHL       | <input type="checkbox"/> Other             |
| <input type="checkbox"/> US Postal |  |

☒ Temp Blank

☐ Temperature out of compliance

Custody seals present?

☐ Yes

Custody seals intact?

☐ Yes ☐ No

☐ Non-Conformance report started

### Exceptions Noted

- ☐ Sample(s) not received in a cooler.
- ☐ Samples(s) received within 6 hrs of sampling.
- ☐ Temperature not taken:

Log-In by:

JP MF EM

OT \_\_\_\_\_

Company: Blackhawk Environmental Testing, Inc. Your PO #: \_\_\_\_\_  
Send Report To: \_\_\_\_\_ Invoice To: BET  
Address: P.O. Box 85 Test America Quote #: \_\_\_\_\_  
City/State/Zip Code: Denver, IA 50622-0085 Project Name: Waynes Mfg  
Telephone Number: 319-984-6600 Fax: \_\_\_\_\_ Cedar Rapids IA  
Sampled By: (Print Name) [Signature] Project Number: 04432  
(Signature) [Signature] Project Manager: ORT

Sample ID	Date Sampled	Time Sampled	# of containers shipped	Grab	Composite	Field Filtered	Preservative							Matrix				Analyze For:							5 Day TAT (SEE NOTE)	Standard TAT	Fax Results	Send QC with report	
							Ice	HNO3 (Red & White Label)	HCl (Blue & White Label)	NaOH (Orange Label)	H2SO4 Plastic (Yellow Label)	H2SO4 Glass (Yellow Label)	None (Black & White Label)	Other (Specify)	Groundwater	Wastewater	Drinking Water	Soil	Other Specify: _____	OA1 - BETX	OA2	OA1 TPH (Gasoline)	CHROMATOGRAMS REQUIRED **						
S1	6/7	12:15	1	X			X						X					X						X		X			
S2		12:25	1	X			X						X					X						X		X			
S3		12:50	1	X			X						X					X						X		X			
S4		13:00	1	X			X						X					X						X		X			
S5		13:25	1	X			X						X					X						X		X			
S6		13:45	1	X			X						X					X						X		X			
S7		14:00	1	X			X						X					X						X		X			

NOTE: All turn around times are calculated from the time of receipt at Test America.  
NOTICE: Pre-Arrangements must be made AT LEAST 48 Hours in ADVANCE to receive results with these turn around time commitments; Additional Charges may be assessed.  
Note: There may be a charge assessed for Test America disposing sample remainders.

NOTES:

\*\*THERE IS A \$4.00 CHARGE FOR EACH CHROMATOGRAM

Relinquished by: <u>[Signature]</u>	Date: <u>6/7/04</u>	Time: <u>20:30</u>	Received by: <u>[Signature]</u>	Date: <u>6/7/04</u>	Time: <u>8:30</u>	Relinquished by:	Date:	Time:
Received for Test America by: <u>Edna Muehlberg</u>			COC Seals Present and Intact? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>			Shipped Via:		
Date: <u>6-8-04</u> Time: <u>8:00</u>			Temperature Upon Receipt					

## ANALYTICAL AND QUALITY CONTROL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

TestAmerica Job: 04.07304

Project Number: 04432  
Project: Wayne Mfg.-Cedar Rapids

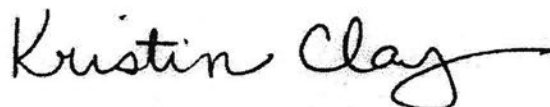
Enclosed is the analytical report for the following samples submitted to the Cedar Falls Division of TestAmerica, Inc. for analysis.

<u>Sample Number</u>	<u>Sample Description</u>	<u>Date Taken</u>	<u>Date Received</u>
803587	DWW	06/07/2004	06/07/2004
803588	TMW-1	06/07/2004	06/07/2004
803589	TMW-2	06/07/2004	06/07/2004
803590	TMW-3	06/07/2004	06/07/2004

All information contained in this report is for the analytical batch(es) in which your sample(s) were analyzed.

TestAmerica, Inc. certifies that the analytical results contained herein apply only to the specific samples analyzed.

Reproduction of this analytical report is permitted only in its entirety.



Kristin Clay  
Inorganics Operations Manager

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803587		SAMPLE DESCRIPTION DWW				DATE-TIME TAKEN 06/07/2004 11:55			
Cyanide, Total	<0.010		mg/L	0.010	06/11/2004	lbb		1699	EPA 335.4
ICP Metals Prep	D	UD	mg/L		06/22/2004	scb	3941		SW 3010A
Dissolved ICP Metals									
Arsenic, Diss (ICP)	<0.80		mg/L	0.80	06/23/2004	heh		1604	SW 6010B
Barium, Diss (ICP)	<0.10		mg/L	0.10	06/23/2004	heh		1615	SW 6010B
Cadmium, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1604	SW 6010B
Chromium, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1604	SW 6010B
Copper, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1612	SW 6010B
Lead, Diss (ICP)	<1.0		mg/L	1.0	06/23/2004	heh		1604	SW 6010B
Nickel, Diss (ICP)	<0.50		mg/L	0.50	06/23/2004	heh		1602	SW 6010B
Selenium, Diss (ICP)	<1.5		mg/L	1.5	06/23/2004	heh		1604	SW 6010B
Silver, Diss (ICP)			mg/L	0.20					SW 6010B
Zinc, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1616	SW 6010B
Mercury, diss. Cold Vapor	<0.0020	R	mg/L	0.00020	06/23/2004	llw		1705	SW 7470A
VOLATILE COMPOUNDS - 8260									
Acetone	<20.0		ug/L	20	06/17/2004	dmd		5159	SW 8260B
Benzene	<0.500		ug/L	0.5	06/17/2004	dmd		5159	SW 8260B
Bromobenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Bromochloromethane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Bromodichloromethane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Bromoform	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Bromomethane	<4.00		ug/L	4.0	06/17/2004	dmd		5159	SW 8260B
Methyl ethyl ketone (MEK)	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B

R - Reporting limit elevated due to matrix interferences

UD - Unable to digest full amount of sample due to matrix problem.

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803587	SAMPLE DESCRIPTION DWW							DATE-TIME TAKEN 06/07/2004 11:55	
n-Butylbenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
sec-Butylbenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
tert-Butylbenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Carbon tetrachloride	<2.00		ug/L	2.0	06/17/2004	dmd		5159	SW 8260B
Chlorobenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Chlorodibromomethane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Chloroethane	<4.00		ug/L	4.0	06/17/2004	dmd		5159	SW 8260B
Chloroform	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Chloromethane	<3.00		ug/L	3.0	06/17/2004	dmd		5159	SW 8260B
2-Chlorotoluene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
4-Chlorotoluene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,2-Dibromo-3-chloropropane	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,2-Dibromoethane (EDB)	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Dibromomethane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,2-Dichlorobenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,3-Dichlorobenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,4-Dichlorobenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Dichlorodifluoromethane	<3.00		ug/L	3.0	06/17/2004	dmd		5159	SW 8260B
1,1-Dichloroethane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,2-Dichloroethane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,1-Dichloroethene	<2.00		ug/L	2.0	06/17/2004	dmd		5159	SW 8260B
cis-1,2-Dichloroethene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
trans-1,2-Dichloroethene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803587	SAMPLE DESCRIPTION DWW							DATE-TIME TAKEN 06/07/2004 11:55	
1,2-Dichloropropane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,3-Dichloropropane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
2,2-Dichloropropane	<4.00		ug/L	4.0	06/17/2004	dmd		5159	SW 8260B
1,1-Dichloropropene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
cis-1,3-Dichloropropene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
trans-1,3-Dichloropropene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Ethylbenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Hexachlorobutadiene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Isopropylbenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
p-Isopropyltoluene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Methylene chloride	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
MTBE	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Methyl isobutyl ketone	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Naphthalene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
n-Propylbenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Styrene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,1,1,2-Tetrachloroethane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,1,2,2-Tetrachloroethane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Tetrachloroethene	<1.00		ug/L	1.0	06/18/2004	dmd		5167	SW 8260B
Toluene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,2,3-Trichlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
1,2,4-Trichlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
1,1,1-Trichloroethane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803587	SAMPLE DESCRIPTION							DATE-TIME TAKEN 06/07/2004 11:55	
1,1,2-Trichloroethane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Trichloroethylene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Trichlorofluoromethane	<4.00		ug/L	4.0	06/17/2004	dmd		5159	SW 8260B
1,2,3-Trichloropropane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,2,4-Trimethylbenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
1,3,5-Trimethylbenzene	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Vinyl Chloride	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Xylenes, Total	<3.00		ug/L	3.0	06/17/2004	dmd		5159	SW 8260B
Hexane	<1.00		ug/L	1.0	06/17/2004	dmd		5159	SW 8260B
Dibromofluoromethane (surr)	94		%	1	06/17/2004	dmd		5159	SW 8260B
Toluene-d8 (surr)	91		%	1	06/17/2004	dmd		5159	SW 8260B
4-Bromofluorobenzene (surr)	95		%	1	06/17/2004	dmd		5159	SW 8260B
Extraction Prep	COMPLETE				06/09/2004	acm	2597		IOWA-OA2
EXTRACTABLE HYDROCARBONS-WATER									
Total Extractable Hydrocarbons	<380		ug/L	380	06/10/2004	amn	2597	4526	IA-OA2/S-8015
Diesel	<380		ug/L	380	06/10/2004	amn	2597	4526	IA-OA2/S-8015
Gasoline	<380		ug/L	380	06/10/2004	amn	2597	4526	IA-OA2/S-8015
Motor Oil	<380		ug/L	380	06/10/2004	amn	2597	4526	IA-OA2/S-8015
N-Octacosane (Surr.)	121		%	100	06/10/2004	amn	2597	4526	IA-OA2/S-8015
VOA Preservation pH	<2		units		06/18/2004	sjg		985	SW 9041A

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803588	SAMPLE DESCRIPTION TMW-1							DATE-TIME TAKEN 06/07/2004 14:50	
Cyanide, Total	9.64		mg/L	0.010	06/11/2004	lbb		1699	EPA 335.4
ICP Metals Prep	D	UD	mg/L		06/22/2004	scb	3941		SW 3010A
Dissolved ICP Metals									
Arsenic, Diss (ICP)	<0.80		mg/L	0.80	06/23/2004	heh		1604	SW 6010B
Barium, Diss (ICP)	0.38		mg/L	0.10	06/23/2004	heh		1615	SW 6010B
Cadmium, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1604	SW 6010B
Chromium, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1604	SW 6010B
Copper, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1612	SW 6010B
Lead, Diss (ICP)	<1.0		mg/L	1.0	06/23/2004	heh		1604	SW 6010B
Nickel, Diss (ICP)	<0.50		mg/L	0.50	06/23/2004	heh		1602	SW 6010B
Selenium, Diss (ICP)	<1.5		mg/L	1.5	06/23/2004	heh		1604	SW 6010B
Silver, Diss (ICP)			mg/L	0.20					SW 6010B
Zinc, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1616	SW 6010B
Mercury, diss. Cold Vapor	<0.0020	R	mg/L	0.00020	06/23/2004	llw		1705	SW 7470A
VOLATILE COMPOUNDS - 8260									
		FM							
Acetone	<100		ug/L	100	06/17/2004	dmd		5159	SW 8260B
Benzene	<2.50		ug/L	2	06/17/2004	dmd		5159	SW 8260B
Bromobenzene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Bromochloromethane	<25.0		ug/L	25	06/17/2004	dmd		5159	SW 8260B
Bromodichloromethane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Bromoform	<25.0		ug/L	25	06/17/2004	dmd		5159	SW 8260B
Bromomethane	<20.0		ug/L	20	06/17/2004	dmd		5159	SW 8260B
Methyl ethyl ketone (MEK)	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B

FM - High detection limits due to sample foaming

R - Reporting limit elevated due to matrix interferences

UD - Unable to digest full amount of sample due to matrix problem.

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803588	SAMPLE DESCRIPTION TMW-1							DATE-TIME TAKEN 06/07/2004 14:50	
n-Butylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
sec-Butylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
tert-Butylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Carbon tetrachloride	<10.0		ug/L	10	06/17/2004	dmd	5159	SW 8260B	
Chlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Chlorodibromomethane	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
Chloroethane	<20.0		ug/L	20	06/17/2004	dmd	5159	SW 8260B	
Chloroform	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Chloromethane	<15.0		ug/L	15	06/17/2004	dmd	5159	SW 8260B	
2-Chlorotoluene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
4-Chlorotoluene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,2-Dibromo-3-chloropropane	<50.0		ug/L	50	06/17/2004	dmd	5159	SW 8260B	
1,2-Dibromoethane (EDB)	<50.0		ug/L	50	06/17/2004	dmd	5159	SW 8260B	
Dibromomethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,2-Dichlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,3-Dichlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,4-Dichlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Dichlorodifluoromethane	<15.0		ug/L	15	06/17/2004	dmd	5159	SW 8260B	
1,1-Dichloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,2-Dichloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,1-Dichloroethene	<10.0		ug/L	10	06/17/2004	dmd	5159	SW 8260B	
cis-1,2-Dichloroethene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
trans-1,2-Dichloroethene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803588	SAMPLE DESCRIPTION TMW-1				DATE-TIME TAKEN 06/07/2004 14:50				
1,2-Dichloropropane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,3-Dichloropropane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
2,2-Dichloropropane	<20.0		ug/L	20	06/17/2004	dmd	5159	SW 8260B	
1,1-Dichloropropene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
cis-1,3-Dichloropropene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
trans-1,3-Dichloropropene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
Ethylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Hexachlorobutadiene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
Isopropylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
p-Isopropyltoluene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Methylene chloride	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
MTBE	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Methyl isobutyl ketone	<50.0		ug/L	50	06/17/2004	dmd	5159	SW 8260B	
Naphthalene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
n-Propylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Styrene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,1,1,2-Tetrachloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,1,2,2-Tetrachloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Tetrachloroethene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Toluene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,2,3-Trichlorobenzene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
1,2,4-Trichlorobenzene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
1,1,1-Trichloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation	Date	Analyst	Prep	Run	Method Reference
				Limit	Analyzed	Initials	Batch	Batch	
SAMPLE NO.		SAMPLE DESCRIPTION				DATE-TIME TAKEN			
803588		TMW-1				06/07/2004 14:50			
1,1,2-Trichloroethane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Trichloroethylene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Trichlorofluoromethane	<20.0		ug/L	20	06/17/2004	dmd		5159	SW 8260B
1,2,3-Trichloropropane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
1,2,4-Trimethylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
1,3,5-Trimethylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Vinyl Chloride	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Xylenes, Total	<15.0		ug/L	15	06/17/2004	dmd		5159	SW 8260B
Hexane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Dibromofluoromethane (surr)	94		%	5	06/17/2004	dmd		5159	SW 8260B
Toluene-d8 (surr)	90		%	5	06/17/2004	dmd		5159	SW 8260B
4-Bromofluorobenzene (surr)	96		%	5	06/17/2004	dmd		5159	SW 8260B
Extraction Prep	COMPLETE				06/09/2004	acm	2597		IOWA-0A2
EXTRACTABLE HYDROCARBONS-WATER									
Total Extractable Hydrocarbons	505		ug/L	380	06/10/2004	amn	2597	4526	IA-OA2/S-8015
Diesel	<380		ug/L	380	06/10/2004	amn	2597	4526	IA-OA2/S-8015
Gasoline	<380		ug/L	380	06/10/2004	amn	2597	4526	IA-OA2/S-8015
Motor Oil	505		ug/L	380	06/10/2004	amn	2597	4526	IA-OA2/S-8015
N-Octacosane (Surr.)	108		%	100	06/10/2004	amn	2597	4526	IA-OA2/S-8015
VOA Preservation pH	<2		units		06/15/2004	sjg		981	SW 9041A

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
<b>SAMPLE NO.</b>	<b>SAMPLE DESCRIPTION</b>						<b>DATE-TIME TAKEN</b>		
803589	TMW-2						06/07/2004 15:20		
Cyanide, Total	4.88		mg/L	0.010	06/11/2004	lbb		1699	EPA 335.4
ICP Metals Prep	D	UD	mg/L		06/22/2004	scb	3941		SW 3010A
Dissolved ICP Metals									
Arsenic, Diss (ICP)	<0.80		mg/L	0.80	06/23/2004	heh		1604	SW 6010B
Barium, Diss (ICP)	0.11		mg/L	0.10	06/23/2004	heh		1615	SW 6010B
Cadmium, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1604	SW 6010B
Chromium, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1604	SW 6010B
Copper, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1612	SW 6010B
Lead, Diss (ICP)	<1.0		mg/L	1.0	06/23/2004	heh		1604	SW 6010B
Nickel, Diss (ICP)	<0.50		mg/L	0.50	06/23/2004	heh		1602	SW 6010B
Selenium, Diss (ICP)	<1.5		mg/L	1.5	06/23/2004	heh		1604	SW 6010B
Silver, Diss (ICP)			mg/L	0.20					SW 6010B
Zinc, Diss (ICP)	<0.20		mg/L	0.20	06/23/2004	heh		1616	SW 6010B
Mercury, diss. Cold Vapor	<0.0020	R	mg/L	0.00020	06/23/2004	llw		1705	SW 7470A
VOLATILE COMPOUNDS - 8260									
		FM							
Acetone	<100		ug/L	100	06/17/2004	dmd		5159	SW 8260B
Benzene	<2.50		ug/L	2	06/17/2004	dmd		5159	SW 8260B
Bromobenzene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Bromochloromethane	<25.0		ug/L	25	06/17/2004	dmd		5159	SW 8260B
Bromodichloromethane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Bromoform	<25.0		ug/L	25	06/17/2004	dmd		5159	SW 8260B
Bromomethane	<20.0		ug/L	20	06/17/2004	dmd		5159	SW 8260B
Methyl ethyl ketone (MEK)	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B

FM - High detection limits due to sample foaming

R - Reporting limit elevated due to matrix interferences

UD - Unable to digest full amount of sample due to matrix problem.

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803589	SAMPLE DESCRIPTION TMW-2				DATE-TIME TAKEN 06/07/2004 15:20				
n-Butylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
sec-Butylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
tert-Butylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Carbon tetrachloride	<10.0		ug/L	10	06/17/2004	dmd	5159	SW 8260B	
Chlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Chlorodibromomethane	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
Chloroethane	<20.0		ug/L	20	06/17/2004	dmd	5159	SW 8260B	
Chloroform	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Chloromethane	<15.0		ug/L	15	06/17/2004	dmd	5159	SW 8260B	
2-Chlorotoluene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
4-Chlorotoluene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,2-Dibromo-3-chloropropane	<50.0		ug/L	50	06/17/2004	dmd	5159	SW 8260B	
1,2-Dibromoethane (EDB)	<50.0		ug/L	50	06/17/2004	dmd	5159	SW 8260B	
Dibromomethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,2-Dichlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,3-Dichlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,4-Dichlorobenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Dichlorodifluoromethane	<15.0		ug/L	15	06/17/2004	dmd	5159	SW 8260B	
1,1-Dichloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,2-Dichloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,1-Dichloroethene	<10.0		ug/L	10	06/17/2004	dmd	5159	SW 8260B	
cis-1,2-Dichloroethene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
trans-1,2-Dichloroethene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803589	SAMPLE DESCRIPTION TMW-2					DATE-TIME TAKEN 06/07/2004 15:20			
1,2-Dichloropropane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,3-Dichloropropane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
2,2-Dichloropropane	<20.0		ug/L	20	06/17/2004	dmd	5159	SW 8260B	
1,1-Dichloropropene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
cis-1,3-Dichloropropene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
trans-1,3-Dichloropropene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
Ethylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Hexachlorobutadiene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
Isopropylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
p-Isopropyltoluene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Methylene chloride	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
MTBE	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Methyl isobutyl ketone	<50.0		ug/L	50	06/17/2004	dmd	5159	SW 8260B	
Naphthalene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
n-Propylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Styrene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,1,1,2-Tetrachloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,1,2,2-Tetrachloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Tetrachloroethene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
Toluene	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	
1,2,3-Trichlorobenzene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
1,2,4-Trichlorobenzene	<25.0		ug/L	25	06/17/2004	dmd	5159	SW 8260B	
1,1,1-Trichloroethane	<5.00		ug/L	5.0	06/17/2004	dmd	5159	SW 8260B	

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO.		SAMPLE DESCRIPTION				DATE-TIME TAKEN			
803589		TMW-2				06/07/2004 15:20			
1,1,2-Trichloroethane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Trichloroethylene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Trichlorofluoromethane	<20.0		ug/L	20	06/17/2004	dmd		5159	SW 8260B
1,2,3-Trichloropropane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
1,2,4-Trimethylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
1,3,5-Trimethylbenzene	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Vinyl Chloride	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Xylenes, Total	<15.0		ug/L	15	06/17/2004	dmd		5159	SW 8260B
Hexane	<5.00		ug/L	5.0	06/17/2004	dmd		5159	SW 8260B
Dibromofluoromethane (surr)	94		%	5	06/17/2004	dmd		5159	SW 8260B
Toluene-d8 (surr)	91		%	5	06/17/2004	dmd		5159	SW 8260B
4-Bromofluorobenzene (surr)	100		%	5	06/17/2004	dmd		5159	SW 8260B
Extraction Prep	COMPLETE				06/09/2004	acm	2597		IOWA-0A2
EXTRACTABLE HYDROCARBONS-WATER									
Total Extractable Hydrocarbons	432		ug/L	380	06/11/2004	amn	2597	4526	IA-0A2/S-8015
Diesel	<380		ug/L	380	06/11/2004	amn	2597	4526	IA-0A2/S-8015
Gasoline	<380		ug/L	380	06/11/2004	amn	2597	4526	IA-0A2/S-8015
Motor Oil	432		ug/L	380	06/11/2004	amn	2597	4526	IA-0A2/S-8015
N-Octacosane (Surr.)	114		%	100	06/11/2004	amn	2597	4526	IA-0A2/S-8015
VOA Preservation pH	<2		units		06/15/2004	sjg		981	SW 9041A

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803590	SAMPLE DESCRIPTION TMW-3				DATE-TIME TAKEN 06/07/2004 15:45				
Cyanide, Total	380	H	mg/L	0.010	06/24/2004	lbb		1708	EPA 335.4
VOLATILE COMPOUNDS - 8260		FM							
Acetone	<200		ug/L	200	06/17/2004	dmd		5159	SW 8260B
Benzene	<5.00		ug/L	5	06/17/2004	dmd		5159	SW 8260B
Bromobenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Bromochloromethane	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B
Bromodichloromethane	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Bromoform	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B
Bromomethane	<40.0		ug/L	40	06/17/2004	dmd		5159	SW 8260B
Methyl ethyl ketone (MEK)	<100		ug/L	100	06/17/2004	dmd		5159	SW 8260B
n-Butylbenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
sec-Butylbenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
tert-Butylbenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Carbon tetrachloride	<20.0		ug/L	20	06/17/2004	dmd		5159	SW 8260B
Chlorobenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Chlorodibromomethane	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B
Chloroethane	<40.0		ug/L	40	06/17/2004	dmd		5159	SW 8260B
Chloroform	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Chloromethane	<30.0		ug/L	30	06/17/2004	dmd		5159	SW 8260B
2-Chlorotoluene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
4-Chlorotoluene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,2-Dibromo-3-chloropropane	<100		ug/L	100	06/17/2004	dmd		5159	SW 8260B
1,2-Dibromoethane (EDB)	<100		ug/L	100	06/17/2004	dmd		5159	SW 8260B

FM - High detection limits due to sample foaming

H - Sample analyzed past holding time

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803590	SAMPLE DESCRIPTION TMW-3							DATE-TIME TAKEN 06/07/2004 15:45	
Dibromomethane	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,2-Dichlorobenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,3-Dichlorobenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,4-Dichlorobenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Dichlorodifluoromethane	<30.0		ug/L	30	06/17/2004	dmd		5159	SW 8260B
1,1-Dichloroethane	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,2-Dichloroethane	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,1-Dichloroethene	<20.0		ug/L	20	06/17/2004	dmd		5159	SW 8260B
cis-1,2-Dichloroethene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
trans-1,2-Dichloroethene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,2-Dichloropropane	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
1,3-Dichloropropane	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
2,2-Dichloropropane	<40.0		ug/L	40	06/17/2004	dmd		5159	SW 8260B
1,1-Dichloropropene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
cis-1,3-Dichloropropene	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B
trans-1,3-Dichloropropene	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B
Ethylbenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Hexachlorobutadiene	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B
Isopropylbenzene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
p-Isopropyltoluene	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Methylene chloride	<50.0		ug/L	50	06/17/2004	dmd		5159	SW 8260B
MTBE	<10.0		ug/L	10	06/17/2004	dmd		5159	SW 8260B
Methyl isobutyl ketone	<100		ug/L	100	06/17/2004	dmd		5159	SW 8260B

## ANALYTICAL REPORT

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
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PO Box 85  
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06/28/2004

Job Number: 04.07304

Client Project ID: 04432

Analyte	Result	Flag	Units	Quantitation	Date	Analyst	Prep	Run	Batch	Batch	Method Reference
				Limit	Analyzed	Initials	No.	No.			
SAMPLE NO. 803590	SAMPLE DESCRIPTION TMW-3						DATE-TIME TAKEN 06/07/2004 15:45				
Naphthalene	<50.0		ug/L	50	06/17/2004	dmd			5159	SW 8260B	
n-Propylbenzene	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
Styrene	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
1,1,1,2-Tetrachloroethane	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
1,1,2,2-Tetrachloroethane	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
Tetrachloroethene	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
Toluene	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
1,2,3-Trichlorobenzene	<50.0		ug/L	50	06/17/2004	dmd			5159	SW 8260B	
1,2,4-Trichlorobenzene	<50.0		ug/L	50	06/17/2004	dmd			5159	SW 8260B	
1,1,1-Trichloroethane	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
1,1,2-Trichloroethane	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
Trichloroethylene	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
Trichlorofluoromethane	<40.0		ug/L	40	06/17/2004	dmd			5159	SW 8260B	
1,2,3-Trichloropropane	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
1,2,4-Trimethylbenzene	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
1,3,5-Trimethylbenzene	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
Vinyl Chloride	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
Xylenes, Total	<30.0		ug/L	30	06/17/2004	dmd			5159	SW 8260B	
Hexane	<10.0		ug/L	10	06/17/2004	dmd			5159	SW 8260B	
Dibromofluoromethane (surr)	94		%	10	06/17/2004	dmd			5159	SW 8260B	
Toluene-d8 (surr)	87		%	10	06/17/2004	dmd			5159	SW 8260B	
4-Bromofluorobenzene (surr)	95		%	10	06/17/2004	dmd			5159	SW 8260B	
Extraction Prep	COMPLETE				06/09/2004	acm		2597		IOWA-0A2	

## ANALYTICAL REPORT

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Analyte	Result	Flag	Units	Quantitation Limit	Date Analyzed	Analyst Initials	Prep Batch No.	Run Batch No.	Method Reference
SAMPLE NO. 803590	SAMPLE DESCRIPTION TMW-3				DATE-TIME TAKEN 06/07/2004 15:45				
EXTRACTABLE HYDROCARBONS-WATER									
Total Extractable Hydrocarbons	6,610		ug/L	380	06/11/2004	amn	2597	4526	IA-OA2/S-8015
Diesel	2,300		ug/L	380	06/11/2004	amn	2597	4526	IA-OA2/S-8015
Gasoline	391		ug/L	380	06/11/2004	amn	2597	4526	IA-OA2/S-8015
Motor Oil	3,920		ug/L	380	06/11/2004	amn	2597	4526	IA-OA2/S-8015
N-Octacosane (Surr.)	207	p	%	100	06/11/2004	amn	2597	4526	IA-OA2/S-8015
VOA Preservation pH	>2		units		06/15/2004	sjg		981	SW 9041A

p - Surrogate recovery limits not applicable. Oil interference.



ANALYTICAL TESTING CORPORATION 704 ENTERPRISE DRIVE · CEDAR FALLS, IA 50613 · 319-277-2401 · 800-750-2401 · FAX 319-277-2425

## QUALITY CONTROL REPORT CONTINUING CALIBRATION VERIFICATION

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Analyte	Prep Batch No.	Run Batch No.	CCV True Value	Units	CCV Conc Found	CCV % Rec	Date Flag Analyzed
Cyanide, Total		1699	245.0	ug/L	247	101	06/11/2004
Cyanide, Total		1699	245.0	ug/L	249	102	06/11/2004
Cyanide, Total		1699	245.0	ug/L	250	102	06/11/2004
Cyanide, Total		1699	122.5	ug/L	123	100	06/11/2004
Cyanide, Total		1699	122.5	ug/L	123	100	06/11/2004
Cyanide, Total		1699	122.5	ug/L	125	102	06/11/2004
Cyanide, Total		1708	245.0	ug/L	243	99	06/24/2004
Cyanide, Total		1708	245.0	ug/L	237	97	06/24/2004
Cyanide, Total		1708	245.0	ug/L	236	96	06/24/2004
Cyanide, Total		1708	122.5	ug/L	119	97	06/24/2004
Cyanide, Total		1708	122.5	ug/L	116	95	06/24/2004
Cyanide, Total		1708	122.5	ug/L	115	94	06/24/2004
Arsenic, Diss (ICP)		1604	5.00	ppm	4.93	99	06/23/2004
Arsenic, Diss (ICP)		1604	5.00	ppm	4.96	99	06/23/2004
Arsenic, Diss (ICP)		1604	5.00	ppm	4.89	98	06/23/2004
Barium, Diss (ICP)		1615	5.00	ppm	4.93	99	06/23/2004
Barium, Diss (ICP)		1615	5.00	ppm	4.97	99	06/23/2004
Barium, Diss (ICP)		1615	5.00	ppm	4.95	99	06/23/2004
Cadmium, Diss (ICP)		1604	5.00	ppm	4.87	97	06/23/2004
Cadmium, Diss (ICP)		1604	5.00	ppm	4.90	98	06/23/2004
Cadmium, Diss (ICP)		1604	5.00	ppm	4.81	96	06/23/2004
Chromium, Diss (ICP)		1604	5.00	ppm	4.99	100	06/23/2004
Chromium, Diss (ICP)		1604	5.00	ppm	5.05	101	06/23/2004
Chromium, Diss (ICP)		1604	5.00	ppm	4.99	100	06/23/2004
Copper, Diss (ICP)		1612	5.00	ppm	5.04	101	06/23/2004
Copper, Diss (ICP)		1612	5.00	ppm	5.09	102	06/23/2004
Copper, Diss (ICP)		1612	5.00	ppm	5.04	101	06/23/2004
Lead, Diss (ICP)		1604	5.00	ppm	4.85	97	06/23/2004
Lead, Diss (ICP)		1604	5.00	ppm	4.92	98	06/23/2004
Lead, Diss (ICP)		1604	5.00	ppm	4.84	97	06/23/2004
Nickel, Diss (ICP)		1602	5.00	ppm	4.92	98	06/23/2004



ANALYTICAL TESTING CORPORATION 704 ENTERPRISE DRIVE · CEDAR FALLS, IA 50613 · 319-277-2401 · 800-750-2401 · FAX 319-277-2425

## QUALITY CONTROL REPORT CONTINUING CALIBRATION VERIFICATION

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Analyte	Prep Batch No.	Run Batch No.	CCV True Value	Units	CCV Conc Found	CCV % Rec	Date Flag Analyzed
Nickel, Diss (ICP)		1602	5.00	ppm	4.93	99	06/23/2004
Nickel, Diss (ICP)		1602	5.00	ppm	4.88	98	06/23/2004
Selenium, Diss (ICP)		1604	5.00	ppm	4.98	100	06/23/2004
Selenium, Diss (ICP)		1604	5.00	ppm	5.03	101	06/23/2004
Selenium, Diss (ICP)		1604	5.00	ppm	4.94	99	06/23/2004
Zinc, Diss (ICP)		1616	5.00	ppm	4.89	98	06/23/2004
Zinc, Diss (ICP)		1616	5.00	ppm	4.91	98	06/23/2004
Zinc, Diss (ICP)		1616	5.00	ppm	4.85	97	06/23/2004
Mercury, diss. Cold Vapor		1705	1.00	ug/L	1.05	105	06/23/2004
VOLATILE COMPOUNDS - 8260							
Benzene		5159	100.0	ug/L	98.7	99	06/17/2004
Bromoform		5159	100.0	ug/L	117	117	06/17/2004
Chlorobenzene		5159	100.0	ug/L	111	111	06/17/2004
1,1-Dichloroethane		5159	100.0	ug/L	88.5	88	06/17/2004
1,1-Dichloroethene		5159	100.0	ug/L	96.7	97	06/17/2004
1,2-Dichloropropane		5159	100.0	ug/L	94.0	94	06/17/2004
Ethylbenzene		5159	100.0	ug/L	107	107	06/17/2004
MTBE		5159	100.0	ug/L	91.2	91	06/17/2004
1,1,2,2-Tetrachloroethane		5159	100.0	ug/L	107	107	06/17/2004
Tetrachloroethene		5159	100.0	ug/L	111	111	06/17/2004
Toluene		5159	100.0	ug/L	105	105	06/17/2004
Trichloroethylene		5159	100.0	ug/L	103	103	06/17/2004
1,2,4-Trimethylbenzene		5159	100.0	ug/L	114	114	06/17/2004
1,3,5-Trimethylbenzene		5159	100.0	ug/L	111	111	06/17/2004
Vinyl Chloride		5159	100.0	ug/L	80.9	81	06/17/2004
Xylenes, Total		5159	300.0	ug/L	326	109	06/17/2004
Dibromofluoromethane (surr)		5159	100.0000	%	96.6	97	06/17/2004
Toluene-d8 (surr)		5159	100.0000	%	100	100	06/17/2004
4-Bromofluorobenzene (surr)		5159	100.0000	%	103	103	06/17/2004
VOLATILE COMPOUNDS - 8260							
Tetrachloroethene		5167	50	ug/L	50	100	06/18/2004



ANALYTICAL TESTING CORPORATION 704 ENTERPRISE DRIVE · CEDAR FALLS, IA 50613 · 319-277-2401 · 800-750-2401 · FAX 319-277-2425

QUALITY CONTROL REPORT  
CONTINUING CALIBRATION VERIFICATION

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Analyte	Prep Batch No.	Run Batch No.	CCV True Value	Units	CCV Conc Found	CCV % Rec	Date Flag Analyzed
EXTRACTABLE HYDROCARBONS-WATER							
Diesel		4526	5,000	ppm	4,410	88	06/10/2004
Gasoline		4526	5,000	ppm	4,730	95	06/10/2004
Motor Oil		4526	5,000	ppm	4,900	98	06/10/2004

## QUALITY CONTROL REPORT BLANKS

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Analyte	Prep	Run	Blank	Flag	Units	Quantitation Date	
	Batch	Batch				Limit	Analyzed
	No.	No.	Value				
Cyanide, Total		1699	<0.010		mg/L	0.010	06/11/2004
Cyanide, Total		1708	<0.010		mg/L	0.010	06/24/2004
Arsenic, Diss (ICP)		1604	<0.080		mg/L	0.080	06/23/2004
Barium, Diss (ICP)		1615	<0.010		mg/L	0.010	06/23/2004
Cadmium, Diss (ICP)		1604	<0.020		mg/L	0.020	06/23/2004
Chromium, Diss (ICP)		1604	<0.020		mg/L	0.020	06/23/2004
Copper, Diss (ICP)		1612	<0.020		mg/L	0.020	06/23/2004
Lead, Diss (ICP)		1604	<0.10		mg/L	0.10	06/23/2004
Nickel, Diss (ICP)		1602	<0.050		mg/L	0.050	06/23/2004
Selenium, Diss (ICP)		1604	<0.15		mg/L	0.15	06/23/2004
Zinc, Diss (ICP)		1616	<0.020		mg/L	0.020	06/23/2004
Mercury, diss. Cold Vapor		1705	<0.00020		mg/L	0.00020	06/23/2004
VOLATILE COMPOUNDS - 8260							
Acetone		5159	<20.0		ug/L	20	06/17/2004
Benzene		5159	<0.500		ug/L	0.5	06/17/2004
Bromobenzene		5159	<1.00		ug/L	1.0	06/17/2004
Bromochloromethane		5159	<5.00		ug/L	5.0	06/17/2004
Bromodichloromethane		5159	<1.00		ug/L	1.0	06/17/2004
Bromoform		5159	<5.00		ug/L	5.0	06/17/2004
Bromomethane		5159	<4.00		ug/L	4.0	06/17/2004
Methyl ethyl ketone (MEK)		5159	<10.0		ug/L	10	06/17/2004
n-Butylbenzene		5159	<1.00		ug/L	1.0	06/17/2004
sec-Butylbenzene		5159	<1.00		ug/L	1.0	06/17/2004
tert-Butylbenzene		5159	<1.00		ug/L	1.0	06/17/2004
Carbon tetrachloride		5159	<2.00		ug/L	2.0	06/17/2004
Chlorobenzene		5159	<1.00		ug/L	1.0	06/17/2004
Chlorodibromomethane		5159	<5.00		ug/L	5.0	06/17/2004
Chloroethane		5159	<4.00		ug/L	4.0	06/17/2004
Chloroform		5159	<1.00		ug/L	1.0	06/17/2004
Chloromethane		5159	<3.00		ug/L	3.0	06/17/2004
2-Chlorotoluene		5159	<1.00		ug/L	1.0	06/17/2004
4-Chlorotoluene		5159	<1.00		ug/L	1.0	06/17/2004
1,2-Dibromo-3-chloropropane		5159	<10.0		ug/L	10	06/17/2004
1,2-Dibromoethane (EDB)		5159	<10.0		ug/L	10	06/17/2004

## QUALITY CONTROL REPORT BLANKS

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Analyte	Prep Batch No.	Run Batch No.	Blank Value	Flag	Units	Quantitation Limit	Date Analyzed
Dibromomethane		5159	<1.00		ug/L	1.0	06/17/2004
1,2-Dichlorobenzene		5159	<1.00		ug/L	1.0	06/17/2004
1,3-Dichlorobenzene		5159	<1.00		ug/L	1.0	06/17/2004
1,4-Dichlorobenzene		5159	<1.00		ug/L	1.0	06/17/2004
Dichlorodifluoromethane		5159	<3.00		ug/L	3.0	06/17/2004
1,1-Dichloroethane		5159	<1.00		ug/L	1.0	06/17/2004
1,2-Dichloroethane		5159	<1.00		ug/L	1.0	06/17/2004
1,1-Dichloroethene		5159	<2.00		ug/L	2.0	06/17/2004
cis-1,2-Dichloroethene		5159	<1.00		ug/L	1.0	06/17/2004
trans-1,2-Dichloroethene		5159	<1.00		ug/L	1.0	06/17/2004
1,2-Dichloropropane		5159	<1.00		ug/L	1.0	06/17/2004
1,3-Dichloropropane		5159	<1.00		ug/L	1.0	06/17/2004
2,2-Dichloropropane		5159	<4.00		ug/L	4.0	06/17/2004
1,1-Dichloropropene		5159	<1.00		ug/L	1.0	06/17/2004
cis-1,3-Dichloropropene		5159	<5.00		ug/L	5.0	06/17/2004
trans-1,3-Dichloropropene		5159	<5.00		ug/L	5.0	06/17/2004
Ethylbenzene		5159	<1.00		ug/L	1.0	06/17/2004
Hexachlorobutadiene		5159	<5.00		ug/L	5.0	06/17/2004
Isopropylbenzene		5159	<1.00		ug/L	1.0	06/17/2004
p-Isopropyltoluene		5159	<1.00		ug/L	1.0	06/17/2004
Methylene chloride		5159	<5.00		ug/L	5.0	06/17/2004
MTBE		5159	<1.00		ug/L	1.0	06/17/2004
Methyl isobutyl ketone		5159	<10.0		ug/L	10	06/17/2004
Naphthalene		5159	<5.00		ug/L	5.0	06/17/2004
n-Propylbenzene		5159	<1.00		ug/L	1.0	06/17/2004
Styrene		5159	<1.00		ug/L	1.0	06/17/2004
1,1,1,2-Tetrachloroethane		5159	<1.00		ug/L	1.0	06/17/2004
1,1,2,2-Tetrachloroethane		5159	<1.00		ug/L	1.0	06/17/2004
Tetrachloroethene		5159	<1.00		ug/L	1.0	06/17/2004
Toluene		5159	<1.00		ug/L	1.0	06/17/2004
1,2,3-Trichlorobenzene		5159	<5.00		ug/L	5.0	06/17/2004
1,2,4-Trichlorobenzene		5159	<5.00		ug/L	5.0	06/17/2004
1,1,1-Trichloroethane		5159	<1.00		ug/L	1.0	06/17/2004
1,1,2-Trichloroethane		5159	<1.00		ug/L	1.0	06/17/2004

## QUALITY CONTROL REPORT BLANKS

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Analyte	Prep	Run	Blank	Flag	Units	Quantitation Date	
	Batch	Batch				Limit	Analyzed
	No.	No.	Value				
Trichloroethylene		5159	<1.00		ug/L	1.0	06/17/2004
Trichlorofluoromethane		5159	<4.00		ug/L	4.0	06/17/2004
1,2,3-Trichloropropane		5159	<1.00		ug/L	1.0	06/17/2004
1,2,4-Trimethylbenzene		5159	<1.00		ug/L	1.0	06/17/2004
1,3,5-Trimethylbenzene		5159	<1.00		ug/L	1.0	06/17/2004
Vinyl Chloride		5159	<1.00		ug/L	1.0	06/17/2004
Xylenes, Total		5159	<3.00		ug/L	3.0	06/17/2004
Hexane		5159	<1.00		ug/L	1.0	06/17/2004
Dibromofluoromethane (surr)		5159	90.6		%	1	06/17/2004
Toluene-d8 (surr)		5159	87.3		%	1	06/17/2004
4-Bromofluorobenzene (surr)		5159	94.8		%	1	06/17/2004
VOLATILE COMPOUNDS - 8260							
Tetrachloroethene		5167	<1.00		ug/L	1.0	06/18/2004
EXTRACTABLE HYDROCARBONS-WATER							
Total Extractable Hydrocarbons	2597	4526	<380		ug/L	380	06/10/2004
Diesel	2597	4526	<380		ug/L	380	06/10/2004
Gasoline	2597	4526	<380		ug/L	380	06/10/2004
Motor Oil	2597	4526	<380		ug/L	380	06/10/2004
N-Octacosane (Surr.)	2597	4526	119		%	100	06/10/2004

## QUALITY CONTROL REPORT LABORATORY CONTROL STANDARD

06/28/2004

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

Job No: 04.07304

Analyte	Prep	Run	LCS		LCS	LCSD	LCS	LCSD	Control	RPD Max.	
	Batch	Batch	Amount	Units	Result	Result	% Rec	% Rec	Limits	RPD	Limit
Cyanide, Total		1699	0.196	mg/L	0.198		101.0		90 - 110		
Cyanide, Total		1708	0.196	mg/L	0.188		95.9		90 - 110		
Arsenic, Diss (ICP)		1604	2.00	mg/L	2.09		104.5		80 - 120		20
Barium, Diss (ICP)		1615	1.00	mg/L	0.9965		99.7		90 - 110		20
Cadmium, Diss (ICP)		1604	1.00	mg/L	0.9743		97.4		80 - 120		20
Chromium, Diss (ICP)		1604	1.00	mg/L	1.02		102.0		80 - 120		20
Copper, Diss (ICP)		1612	2.00	mg/L	2.08		104.0		80 - 120		20
Lead, Diss (ICP)		1604	2.00	mg/L	2.00		100.0		80 - 120		20
Nickel, Diss (ICP)		1602	2.00	mg/L	1.97		98.5		80 - 120		20
Selenium, Diss (ICP)		1604	4.00	mg/L	4.08		102.0		80 - 120		20
Zinc, Diss (ICP)		1616	1.00	mg/L	0.9930		99.3		80 - 120		20
Mercury, diss. Cold Vapor		1705	0.00164	mg/L	0.00170		103.7		80 - 125		
VOLATILE COMPOUNDS - 8260											
Benzene		5159	20.0	ug/L	19.7		98.5		81 - 124		27
Chlorobenzene		5159	20.0	ug/L	21.4		107.0		77 - 125		28
1,1-Dichloroethene		5159	20.0	ug/L	21.0		105.0		53 - 143		28
Ethylbenzene		5159	20.0	ug/L	20.2		101.0		65 - 140		24
MTBE		5159	20.0	ug/L	18.4		92.0		70 - 133		26
Tetrachloroethene		5159	20	ug/L	22		110.0		54 - 144		26
Toluene		5159	20.0	ug/L	20.1		100.5		73 - 127		21
1,2,3-Trichlorobenzene		5159	20.0	ug/L	18.2		91.0		53 - 143		35
1,2,4-Trichlorobenzene		5159	20.0	ug/L	19.6		98.0		52 - 142		35
Trichloroethylene		5159	20.0	ug/L	20.9		104.5		81 - 121		16
1,2,4-Trimethylbenzene		5159	20.0	ug/L	21.3		106.5		52 - 142		23
1,3,5-Trimethylbenzene		5159	20.0	ug/L	21.7		108.5		63 - 141		24
Xylenes, Total		5159	60.0	ug/L	63.7		106.2		75 - 130		20
Dibromofluoromethane (surr)		5159	100	%	95.0		95.0		85 - 118		50
Toluene-d8 (surr)		5159	100	%	94.0		94.0		76 - 120		50
4-Bromofluorobenzene (surr)		5159	100	%	102.0		102.0		76 - 116		50
VOLATILE COMPOUNDS - 8260											
Tetrachloroethene		5167	20	ug/L	21		105.0		54 - 144		26
EXTRACTABLE HYDROCARBONS-W											

## QUALITY CONTROL REPORT LABORATORY CONTROL STANDARD

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job No: 04.07304

Analyte	Prep	Run	LCS	Units	LCS	LCSD	LCS	LCSD	Control	RPD Max.	
	Batch	Batch								Amount	Result
Gasoline	2597	4526	2,000	ug/L	950	1,110	47.5	55.5	40 - 96	15.5	
N-Octacosane (Surr.)	2597	4526	100	%	117	116	117.0	116.0	41 - 151	0.9	20

## QUALITY CONTROL REPORT MATRIX SPIKE/MATRIX SPIKE DUPLICATE

Ollie Thurman  
BLACKHAWK ENVIRONMENTAL  
TESTING, INC.  
PO Box 85  
Denver, IA 50622-0085

06/28/2004

Job Number: 04.07304

Analyte	Prep	Run	Sample	Units	MS Spike			MSD Spike			RPD	Flag(s)
	Batch	Batch			Conc.	MS	MS	Conc.	MSD	MSD		
	No.	No.	Result		Added	Result	%Rec.	Added	Result	% Rec.		
Cyanide, Total		1699	<0.010	mg/L	0.196	0.203	104	0.196	0.199	102	2.0	
Cyanide, Total		1708	<0.010	mg/L	0.196	0.186	95	0.196	0.175	89	6.1	MSO
Arsenic, Diss (ICP)		1604	<0.080	mg/L	2.00	2.15	108	2.00	2.11	106	1.9	
Barium, Diss (ICP)		1615	0.090	mg/L	1.00	1.09	100	1.00	1.07	98	1.9	
Cadmium, Diss (ICP)		1604	<0.020	mg/L	1.00	1.00	100	1.00	0.9819	98	1.8	
Chromium, Diss (ICP)		1604	<0.020	mg/L	1.00	1.04	104	1.00	0.9980	100	4.1	
Copper, Diss (ICP)		1612	<0.020	mg/L	2.00	2.09	104	2.00	2.06	103	1.4	
Lead, Diss (ICP)		1604	<0.10	mg/L	2.00	2.04	102	2.00	1.99	100	2.5	
Nickel, Diss (ICP)		1602	<0.050	mg/L	2.00	2.00	100	2.00	1.96	98	2.0	
Selenium, Diss (ICP)		1604	<0.15	mg/L	4.00	4.15	104	4.00	4.07	102	1.9	
Zinc, Diss (ICP)		1616	0.042	mg/L	1.00	1.06	102	1.00	1.04	100	1.9	
Mercury, diss. Cold Vapor		1705	<0.00020	mg/L	0.00164	0.00177	108	0.00164	0.00169	103	4.6	
VOLATILE COMPOUNDS - 8260												
Benzene		5159	<0.500	ug/L	20.0	19.5	98	20.0	19.8	99	1.5	
Chlorobenzene		5159	<1.00	ug/L	20.0	21.6	108	20.0	21.5	108	0.5	
1,1-Dichloroethene		5159	<2.00	ug/L	20.0	20.6	103	20.0	20.0	100	3.0	
Ethylbenzene		5159	<1.00	ug/L	20.0	20.4	102	20.0	19.4	97	5.0	
MTBE		5159	<1.00	ug/L	20.0	19.1	96	20.0	19.0	95	0.5	
Tetrachloroethene		5159	124	ug/L	20.0	149	125	20	148	120	0.7	*
Toluene		5159	<1.00	ug/L	20.0	20.4	102	20.0	20.6	103	1.0	
1,2,3-Trichlorobenzene		5159	<5.00	ug/L	20.0	23.7	118	20.0	25.3	126	6.5	
Trichloroethylene		5159	7.82	ug/L	20.0	27.6	99	20.0	27.1	96	1.8	
1,2,4-Trimethylbenzene		5159	<1.00	ug/L	20.0	21.2	106	20.0	21.2	106	0.0	
1,3,5-Trimethylbenzene		5159	<1.00	ug/L	20.0	21.5	108	20.0	21.5	108	0.0	
Xylenes, Total		5159	<3.00	ug/L	60.0	65.0	108	60.0	65.1	108	0.2	
VOLATILE COMPOUNDS - 8260												
Tetrachloroethene		5167	565	ug/L	200.0	836	136	200.0	799	117	4.5	MSO

\* - Sample concentration is greater than four times the spike concentration

MSO - MS and/or MSD recoveries are outside of control limits

TestAmerica Job Number: 04.07304

## ATTACHMENTS

Following are the sample receipt log and the chain of custody applicable to this analytical report.

Any abnormalities or departures from sample acceptance policy shall be documented on the "Sample Receipt and Temperature Log Form" and Sample Non-Conformance Form" (if applicable) included with this report.

For information concerning certifications of this facility or another TestAmerica facility please visit our website at [www.TestAmericaInc.com](http://www.TestAmericaInc.com).

This data has been produced in compliance with 2001 NELAC Standards (July 2003), except where noted.

Samples collected by TestAmerica Field Services personnel are noted on the Chain of Custody (COC) and are sampled in accordance with TA-CF SOP CF09-01.

This report shall not be reproduced, except in full, without written approval of the laboratory.

*For questions regarding this report, please contact the individual who signed the analytical report.*

## Sample Receipt and Temperature Log Form

Client: Blackhawk Environmental Project: Wayne MFG

City: Dumas, IA

Date: 6/7/04 Receiver's Initials DK Time (Delivered): 8:30

### Temperature Record

Cooler ID# (If Applicable)

12 °C / On Ice

### Thermometer:

- ☐ IR - 905085 "A"  
☐ IR - 809065 "B"  
☐ CF07-03-T2  
☐ 22126775

### Courier:

- |                                    |  |
|------------------------------------|--|
| <input type="checkbox"/> Airborne  | <input type="checkbox"/> Speedy            |
| <input type="checkbox"/> UPS       | <input type="checkbox"/> TA Courier        |
| <input type="checkbox"/> Velocity  | <input type="checkbox"/> TA Field Svs      |
| <input type="checkbox"/> FedEx     | <input checked="" type="checkbox"/> Client |
| <input type="checkbox"/> DHL       | <input type="checkbox"/> Other             |
| <input type="checkbox"/> US Postal |  |

☒ Temp Blank

☐ Temperature out of compliance

Custody seals present?

☐ Yes

Custody seals intact?

☐ Yes ☐ No

☐ Non-Conformance report started

### Exceptions Noted

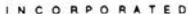
- ☐ Sample(s) not received in a cooler.  
☐ Samples(s) received within 6 hrs of sampling.  
☐ Temperature not taken:

*mf 6/8/04 Per Ollie, 6010 diss. metals OK full list VOCs.  
 Watch samples may emit gas — high CH content*

Log-In by:

JP MF EM

OT \_\_\_\_\_



Phone: 319-277-2401 or 1-800-750-2401  
Fax: 319-277-2425

Your PO #: \_\_\_\_\_

Invoice To: BET

Test America Quote #: \_\_\_\_\_

Project Name: Wayne M

Geely Rapids - IA

Project Number: 04432

Project Manager: ORT

<p><b>NOTE:</b> All turn around times are calculated from the time of receipt at Test America.</p> <p><b>NOTICE:</b> Pre-Arrangements must be made <b>AT LEAST 48 Hours in ADVANCE</b> to receive results with these turn around time commitments; Additional Charges may be assessed.</p> <p>Note: There may be a charge assessed for Test America disposing sample remainders.</p>					<p><b>NOTES:</b> Please filter in lab (call me)</p> <p><b>**THERE IS A \$4.00 CHARGE FOR EACH CHROMATOGRAM</b></p>						
Relinquished by:		Date	Time	Received by:		Date	Time	Relinquished by:		Date	Time
[Signature]		6/7/04	20:30	[Signature]		6/7/04	8:30				
Received for Test America by:		Date	Time	COC Seals Present and Intact? Yes No			Shipped Via:				
[Signature]		6-8-04	8:00								
Temperature Upon Receipt											

\*\*THERE IS A \$4.00 CHARGE FOR EACH CHROMATOGRAM

# SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW1		Facility Wayne's Mfg. Co. Name: #04432		Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA			
Boring Depth (ft) X Diameter (in): 18' x 7"				Drilling Method: 3 1/4" HSA			
Well Contractor Name: Ollie Thurman Registration Number: 40746				Logged by: Ollie Thurman			
Ground Surface Elevation (ASL): 821.50			Top of Casing Elevation (ASL): 823.12				
Date: 5/19/04 Start Time: 9:20		Date: 5/19/04 End Time: 10:30		UST Number			
				EPA RCRA ID Number : IAD005277256			
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS	
-			1.5	SS	0.0	Topsoil, ORGANIC CLAY, dark brown (CL)	
--2			3	SS	0.0	SANDY LEAN CLAY with a little gravel, brown mottled with gray (CL)	
-			5	SS	0.0		
--4			7	SS	0.0	SILTY SAND, brown, moist (SM)	
-			9	SS	0.0	SANDY LEAN CLAY with a little gravel, dense, brown with reddish brown (CL)	
--6			11	SS	0.0		
-			13	SS	0.0	SILTY SAND, brown, wet (SM)	
--8			15	SS	0.0	SANDY LEAN CLAY, with a little gravel, gray, dense (CL)	
-			16.5	SS	0.0		
--10			18	SS	0.0		
-							
--12							
-							
--14							
-							
--16							
-							
--18							
-							
--20						End of boring @ 18'	

\* SS (split spoon) HS (hollow stem auger)

Observations	Date:	5/19/04	6/7/04			
Water Levels (ASL)	Level:	808.64	818.60			
Static Water Level Symbol	Time:	11:00	14:26			

# SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring/ Well Number: TMW2		Facility Wayne's Mfg. Co. Name: #04432	Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA			
Boring Depth (ft) X Diameter (in): 18' x 7"			Drilling Method: 3 1/4" HSA			
Well Contractor Name: Ollie Thurman Registration Number: 40746			Logged by: Ollie Thurman			
Ground Surface Elevation (ASL): 823.07			Top of Casing Elevation (ASL): 822.65			
Date: 5/19/04 Start Time: 10:55	Date: 5/19/04 End Time: 12:00	UST Number	EPA RCRA ID Number : IAD005277256			
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS
-			1.5	SS	0.0	FILL, 6" of gravel over clay, brown
-2			3	SS	0.0	SANDY LEAN CLAY with a little gravel, brown mottled with gray (CL)
-4			5	SS	0.0	
-6			7	SS	0.0	SILTY SAND, brown, wet (SM)
-8			9	SS	0.0	
-10			11	SS	0.0	SANDY LEAN CLAY with a little gravel, brown mottled gray, to gray, dense (CL)
-12			13	SS	0.0	
-14			15	SS	0.0	
-16			16.5	SS	0.0	
-18			18	SS	0.0	
-20						End of boring @ 18'

\* SS (split spoon) HS (hollow stem auger)

Observations	Date:	5/19/04	6/7/04			
Water Levels (ASL)	Level:	818.89	821.70			
Static Water Level Symbol	Time:	14:25	15:00			

# SOIL BORING LOG AND MONITORING WELL CONSTRUCTION DIAGRAM

Boring / Well Number: TMW3		Facility Wayne's Mfg. Co. Name: #04432		Facility: 5051 Williams Blvd. SW Street Address: Cedar Rapids, IA			
Boring Depth (ft) X Diameter (in): 20' x 7"				Drilling Method: 3 1/4" HSA			
Well Contractor Name: Ollie Thurman Registration Number: 40746				Logged by: Ollie Thurman			
Ground Surface Elevation (ASL): 823.98			Top of Casing Elevation (ASL): 823.59				
Date: 5/19/04 Start Time: 12:45		Date: 5/19/04 End Time: 13:50		UST Number			
				EPA RCRA ID Number : IAD005277256			
Depth (Feet)	Well Construction Details	Blow Count if applicable	Sample No.	Type*	PID / FID Reading	Rock Formations, Soil, Color and Classifications, Observations (moisture, odor, etc.) First column for USCS	
-			1.5	SS	1.4	FILL, 6" of gravel over clay, dark brown	
--2			3	SS	1.7	SANDY LEAN CLAY, discolored green (CL)	
-			5	SS	0.8		
--4			7	SS	1.1	SANDY LEAN CLAY, brown, discolored gray and reddish brown (CL)	
-			9	SS	2.3	SAND light brown, medium grained (SP)	
--6			11	SS	1.0		
-			13	SS	0.0	SANDY LEAN CLAY with a little gravel, brown mottled with gray to gray, dense (CL)	
--8			15	SS	0.0		
-			17	SS	0.0		
--10			18.5	SS	0.0		
-			20	SS	0.0		
--12							
-							
--14							
-							
--16							
-							
--18							
-							
--20						End of boring @ 20'	

\* SS (split spoon) HS (hollow stem auger)

Observations	Date:	5/19/04	6/7/04			
Water Levels (ASL)	Level:	dry	822.58			
Static Water Level Symbol	Time:	14:30	15:30			